BRUHAT BENGALURU MAHANAGARA PALIKE

YELAHANKA ZONE

NAME OF WORK : DRILLING OF BOREWELL AND PROVIDING PIPE LINE IN YELAHANKA OLD TOWN AREA AND VILLAGE AREA IN WARD NO.02

							Estimate Cost Rs.	50.00	Lakhs
Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
1	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site.,								
		Each BW	2				2	1938.46	3877.00
2	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) P. 46 / I. 9.1 PRED SR 2012-13								
a	0 to 50 m	Rmtr	2	50.00			100.00	315.18	31518.00
b	50 to 100 m		2	50.00			100.00	412.00	41200.00
c	100 to 150 m		2	50.00			100.00	458.35	45835.00
d	150 to 200 m		2	50.00			100.00	484.10	48410.00
e	200 to 250 m		2	50.00			100.00	560.32	56032.00
f	250 to 300 m		2	50.00			100.00	600.49	60049.00
g	300 to 350 m		2	45.00			90.00	640.66	57659.00
3	Supply of ISI mark 175 mm nominal bore, Plain end steel casing pipe - grade of Steel Fee 410 of wall thickness 5.4mm thick confirming to IS 4270:2001 and latest amendments, electric resistance welded steel tube material and confirming to IS 1387/1993 and manufactured by baseic open hearth electric or basic oxygen process in random length of 5 to 7 mts both ends threaded confirming tio IS 554/1985, one end fixied with socket confirming to IS 4270:2001 and the other end with screwed pipes ISI Marking weighing 25.10Kg/mtr (Inclusive of all taxes and durties) Prices include Collar-medium duty (PRED Bangalore Circle SR 2012-13 P. iii, I No. 84 PRED SR 2012-13)								
		Rmtr	2	75.00			150.00	1325.00	198750.00
4	Providing 200mm dia PVC pipe 10kg/cm2 (PRED Bangalore Circle SR 2012-13 P 15 It.3.43)								
		Rmtr	2	20.00			40.00	1721.13	68845.00
5	Providing and fixing 175mm Borewell Cap (PRED Bangalore Circle SR 2012-13 P.No.iii, I No. 85)								
		Each	2				2	100.00	200.00
6	Providing and fixing 175mm dia MS collar (PRED Bangalore Circle SR 2012-13 P.No.iii, I No. 86)								
		Each	9	2			18	150.00	2700.00

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
1	Supply and delivery of submersible pump sets suitable for borewell of 165 mm dia with specified dyty conditions as detailed below and satisfying performance characteristics for pump and moter specified in BIS with ISI mark with a minimum efficiency of 42% pump shall confirm to IS 8034/2002 and motor conforming to IS 9283/1995 with ISI certification with latest amendments for the following. 7.5HP/75KW ATALANTA/SUGUNA/CRI/KIRLOSKAR /OTHER EQUIVALENT PUMPS (page no.XXXXII / Sl.No.33 Code No.2)2016-17								
		No	2				2	70600.00	141200.00
2	Providing and fixing in trenches galvanised / mild steel tubes (medium grade) 50 mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. (SR of PWP, & IWTD SR 2016-17, P No 90, I No.13.15)								
		Rmtr	2	330.00			660.00	457.92	302227.00
3	Heavy Duty Collar 50 mm dia								
		Nos	55	2			110	130.00	14300.00
4	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 & confirming to GTP of GROUP-A. P. No. 12 / I No. 2.10.4(1) 3C x 6 Sqm mm KPWD Electrical SR 2014-								
		Mtr	2x2	345.00			1380.00	188.70	260406.00
5	Labour charges for erection as new /repaired submercible pumpset allong with GI pipe (32/50mm) cable (new submercible pumpset if required will be supplied by the department free of cost and released pumpset shoud be handed over to department including transportation (Each lenth =6.00) Page No. 558, Items No-3 EWSSB SR for 2014-15)								
	(1x330)/6)=53.00	Per Length	2	55.00			110	88.00	9680.00
6	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc., P No. 44 / I No. 6.6.6 KPWD Electrical SR 2014-15								
		Each	2				2	302.00	604.00
7	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A P No. 55/ I No. 7.4.4 4 core 16 Sqmm KPWD Electrical SR 2014-15								
		Mtr	2	50.00			100.00	140.40	14040.00
8	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct. P No. 61 / I No. 7.8.1 6Sqmm to 16 Sqmm) KPWD Electrical SR 2014-15								
		Mtr	2	50.00			100.00	10.80	1080.00
9	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) P No. 61 / I. No. 7.9.3 KPWD Electrical SR 2014-15								
	For Cutting Road Surface	Mtr	2	25.00			50.00	85.00	4250.00

Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV P. No. 62 / I No. 7.12.1 KPWD Electrical SR 2014-15								
40mm dia GI pipe	Mtr	2	4.00			8.00	345.00	2760.00
Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc., P. No. 62 / I.No. 7.13.2 KPWD Electrical SR 2014-15								
16Sqmm	No.	2				2.00	280.00	560.00
Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc. the pipe shall have 16 through holes of 122 mm dia, (P No. 55, I No. 7.1) KPWD Electrical SR 2014-15								
	No	2				2	2727.00	5454.00
Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers.P No. 44 / I No. 6.7.2 KPWD Electrical SR 2014-15								
32 Amps	No.	4				4	180.00	720.00
KSRB 13-7.1-4: Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications NO KBS 13.2.16 / 13.13 Page No. 93 Item No. 13.55 / PWD SR 2016-17								
	Nos	2				2	1585.76	3172.00
Basic Rate	1496.00							
Area Weightage @ 6%	89.76							
Total	**1585.76**							
Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete 50 mm dia. P. No. 92 / I. No. 13.81.3 PWD SR 2016-17								
50mm dia	No	2				2	227.90	456.00
Basic Rate	215.00							
Area Weightage @ 6%	12.90							
Total	**227.90**							
Supplying and fixing 50mm dia GI X nipple with ISI mark with all lead and lift loading unloading and labour charges etc complete								
	No	2	4.00			8	80.00	640.00
Supplying shunt capaitors conforming to IS 2834, 3phase 400/440 volts grade for power factor improvement of rotating machinery, Capacitor in KVAR rating Nos, 2KVAR capacity with all lead and lift =, loading, unloading and labour charges etc complete as per specifications								
	No	2				2	350.00	700.00
Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 5-32Amps TPN P No. 47 / I No.6.16.5 KPWD SR 2014-15								

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
		No	2				2	1547.00	3094.00
25	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete box of 21600sqcm @ Rs0.33 SWG P.No. 49, I. No. 6.40.2 KPWD Electrical SR 2014-15								
	16SWG	Sq.Cm							
			2	21600			43200.00		
							43200.00	0.33	14256.00
26	Supplying and delivery at site brand new star / Essen/ Lotus/Sun-shines/Adarsh/ GK Controls best indigenous make combined energy meter - cum- control panel board unit of size 600x450 x200 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 ph, 50Hz, 380/440 volts, A.C supply with spring loaded latch, locking device with a key ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided. the combined energy meter cum- control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitable pumpset. 12.5HP to 15 HP Star Delta Starter SERDED Rate								
		No.	2				2	11000.00	22000.00
27	Cutting of road surface for pipeline trenches and disposing the excavated stuff as directed including barricadding, danger lighting etc in the Asphalt Surface Road (P.N. 257, I.N. 37.38)								
		Cum	1	1880.00	0.60	0.20	225.60		
							225.60	340.00	76704.00
	Basic Rate	340.00							
	Area Weightage @ 6%	20.40							
	Total	360.40							
28	KSRB 2-2.1 : Earth work excavation for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications, specification, No. KBS 2.1(a) / 2.3.5, No. 5/ Item No. 2.3)								
	Vinayaka Layout, Puttenahalli	Cum	1	1880.00	0.60	0.75	846.00		
	JP Colony						846.00	189.00	159894.00
	Basic Rate	189.00							
	Area Weightage @ 6%	11.34							
	Total	200.34							
29	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings, this includesjointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling, & testing of joints complete. (external work) (Page No.-97, Item No.13.87.7) -do- 62.50mm nominal pipes OD Pipes								
	Vinayaka Layout, Puttenahalli	Rmtr	1	1880.00			1880.00	1473.40	2769992.00
	JP Colony								
	Basic Rate	1390.00							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Area Weightage @ 6%	83.40							
	Total	1473.40							
	KSRRB M400- Wet Mix Macadam - KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (P.No.158 I.No.20.18)								
	Vinayaka Layout, Puttenahalli	Cum	1	1880.00	0.60	0.20	225.60		
	JP Colony						**225.60**	1668.00	**376301.00**
	Basic Rate	1668.00							
	Area Weightage @ 6%	100.08							
	Total	**1768.08**							
	Refilling available earth around pipelines, cables in layers not exceeding 20cms in depth compacting each deposited layers by ramming after watering lead upto 50m and lift upto 1.5m including cost of labour complete as per specification (P.No.6 I.No.2.11)								
		Cum	Qty.Vide Item No.28				**846.00**	61.00	**51606.00**
	Basic Rate	76.00							
	Area Weightage @ 6%	4.56							
	Total	**80.56**							
	KSRB 13.6.3-6 : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 50mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6/13.3 P. 92 / I.13.37 PWD SR 2016-17								
		Each	15				**15**	2175.12	**32627.00**
	Basic Rate	2052.00							
	Area Weightage @ 6%	123.12							
	Total	**2175.12**							
	KSRB 2-2.1 : **Earth work excavation** for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width, in **ordinary soil** not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications, specification, No, KBS 2.1(a) / 2.3.5, No.5/Item No. 2.3)								
		Cum							
			2	2.10	2.10	0.45	3.97		
							3.97	200.34	**795.15**
	Basic Rate	189.00							
	Area Weightage @ 6%	11.34							
	Total	200.34							
	KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregate /sand/kaner/ Moorum KSRRB M100-1 Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications MORTH -100/ Chapter 1 (Page No.133/ Item No 17.1)								
		Cum							
			Qty Vide Item No.33				**3.97**	100.00	**396.90**
	Average Weight of Earth 1.28 Tonne/Km								

Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
Basic Rate Lead Charges for 10.00 Kms (2.50X1.28X10.00)	32.00							
Add loading and unloading Item No 17.1)	68.00							
Total	**100.00**							
KSRB 4-1.3: Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregates @ 0.57cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No.KBS 4.1, 4.2 (P.12/I.4.3)								
	Cum							
		2	2.10	2.10	0.15	1.32		
						1.32	5159.02	**6825.38**
Basic Rate	4867.00							
Area Weightage @ 6%	292.02							
Total	**5159.02**							
KSRB 5.2.3 : Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 (Page No. 23/ Item No. 5.6)								
	Cum							
		2	1.80	1.80	0.45	2.92		
		2	1.50	1.50	0.75	3.38		
						6.29	4438.22	**27920.84**
Basic Rate	4187.00							
Area Weightage @ 6%	251.22							
Total	**4438.22**							
KSRB 15.1.1: Providing **flush pointing** to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications.(Page No.112/Item No. 15.1)								
	Sqm							
		8	1.50		0.75	9.00		
						9.00	102.82	**925.38**
Basic Rate	97.00							
Area Weightage @ 6%	5.82							
Total	**102.82**							
KSRB 4-1.7 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs with 20mm and down size graded granite metal coarse aggregate @ 0.84cum and fine aggregate @ 0.56 cum machine mixed concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2.(P No. 13 / Item No.4.7)								
	Cum							
		2	1.50	1.50	0.10	0.45		
						0.45	5598.92	**2519.51**
Basic Rate	5282.00							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Area Weightage @ 6%	316.92							
	Total	5598.92							
39	Providing and fixing RCC precast Slabs of 0.10 m thick of CC 1:2:4 with 20 mm and down size graded granite metal , machine mixed , including cost of all material , labour , HOM of Machinery , curing complete								
		Cum							
			2	3.142x1.20x1.20 / 4			2.262		
							2.262	2100.00	4750.70
	Date Rate	2100.00							
40	Providing and Laying reinforced cement concrete pipe NP3 for culverts including pointing ends, and fixing collar with cement mortar 1:2 including cost of all materials labour curing complete as per specifications. specifications No.KSRB 1000,2300 MORTH Specification No.1000/2300 -do-1200mm dia (P.No.253/Item No.34.6.6)								
		Cum							
			2			3.00	6.00		
							6.00	9849.52	59097.12
	Basic Rate	9292.00							
	Area Weightage @6%	557.52							
	Total	9849.52							
41	Providing and fixing on position brass bib cock of approved quality 25mm dia nomial bore including cost of all materials labour and HOM of equipments with all leads complete as per specifications.(P.N .91 I.N 13.25)								
		Each							
			25				25.00	284.08	7102.00
	Basic Rate	268.00							
	Area Weightage @6%	16.08							
	Total	284.08							
42	Miscellaneous and unforeseen charges								5869.00
								Grand Total Amount	5000000.00
	(Rupees Fifty Lakhs Only)								

ERTIFICATE

) The site has been inspected and the work is found to be necessary.

) The rates adopted are as per PW.P IWTD SR of 2016-17, Elecrical 2014-15, PRED 2012-13 & SE-RDED approved Rate and Data Rate of Bangalore Circle. 50·0

) The provisions were made in this estimate are necessary and adequate.

) The area comes under the Bruhat Bengaluru Mahanagara Palike Limits.

ADMINISTRATIVELY SANCTIONED FOR Rs

Rupees fifty lakhs only

Under Job No. 002-18-000015

Assistant Engineer
Ward No.02
B.B.M.P

Executive Engineer
Yelahanka Division
B.B.M.P

Assistant Executive Engineer
Yelahanka Sub Division
B.B.M.P

Subject to conditions con'd ne

enclosed memo EE ( ) No

Dt Estimate A/S

J.C(Y)DD/AS/66/17-18 No

Technical Sanction
Accorded For 50 lakhs only
Head of A/C P.0190
CER NO :TS/565/P&R/01.02.18

dated 1.2.2018 Rs 50.00 Lac

TA , CE (YNK),

Joint Commissione
(Yelahanka Zone)
BBMP, Bengaluru-5